1326 CALIBRATION OF SLURRY SEAL MACHINE

Width of belt = 1.79'
Length of belt Travel per Revolution = 1.67'
Depth of Material (Gate Opening) 3-1/2 = 0.29'
Weight of Aggregate per Cubic Foot = 86.51 pounds

1.79 x 1.67 x 0.29 = 0.866897 Cubic Feet
0.866897 x 86.51 = 75.00 Weight of Material per Revolution

1 Revolution = 1.75 Gallons Emulsion
Weight of Emulsion = 8.33 Pounds
1.75 x 8.33 = 14.58 Pounds Emulsion per Revolution

75.00	Weight of Aggregate per Revolution
14.58	Weight of Emulsion
89.58	

14.58 / 89.58 = 16.3% Specification -- 14-18
75.00 / 89.58 = 83.7% Specification -- 82-86

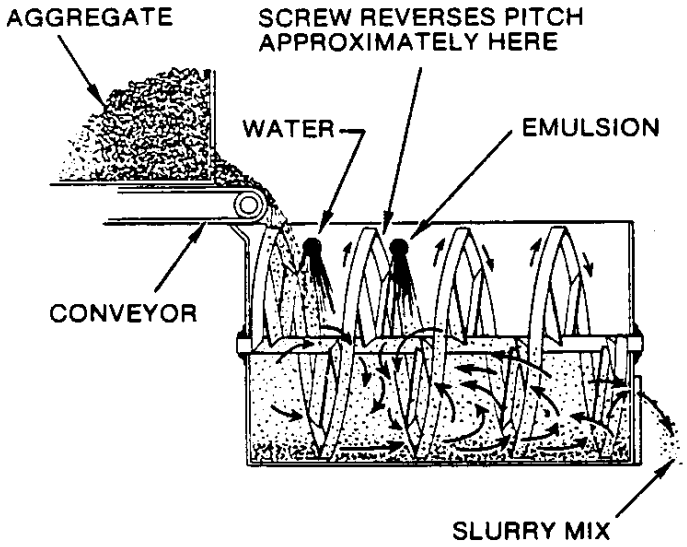

Figure A
Flow diagram of slurry mixer

The mixer contains a specially designed agitator built with a change of pitch in the blades at a point approximately one-third from the feet end. This causes the material in the mixer to be blended toward the middle from both ends of the unit. The product is a homogeneous slurry mix. It is forced by the outer spiral of the agitator to the rear of the mixer where it is allowed to flow out into the spreader. Figure "A" is a diagram of this mixing operation. Note that the emulsion is fed into the mixer at the point where opposing forces are motion meet. This insures that the emulsion does not contact dry material which is important to the success of the process.